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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,847	01/30/2004	Peter Williamson	003797.00737	4097

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EXAMINER	
VAUGHN, GREGORY J	
ART UNIT	PAPER NUMBER
2178	

NOTIFICATION DATE	DELIVERY MODE
09/08/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/767,847	WILLIAMSON ET AL.	
	Examiner	Art Unit	
	GREGORY J. VAUGHN	2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 May 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,13-15,17,19-21,24-27 and 34-42* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 13-15, 17, 19-21, 24-27 and 34-42* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Action Background

1. This action is responsive to the amendment filed on 5/23/2008.

2. Applicant has amended claims 1, 14, 21 and 27; and added new claims 40-42. Claims 2-12, 16, 18, 22, 23 and 28-33 were previously canceled.

3. Claims 1, 13-15, 17, 19-21, 24-27 and 34-42 are pending in the case; claims 1, 14 and 27 are independent claims.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> *(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.*

5. Claims 1, 13-15, 17, 19-21, 24-27 and 34-42 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Hawkins al. US Patent 6,493,464, filed 9/8/1997, patented 12/10/2002 (hereinafter Hawkins) in view of Forcier, US Patent 6,499,043, filed 9/12/1996, patented 12/24/2002.

6. **Regarding independent claim 1**, Hawkins discloses a computerized method of receiving user input identifying a symbol, a text expansion and a program, associating the text expansion or the program with the symbol, and determining whether the handwritten user input represents a symbol that is a short hand entry for a text expansion, a program or function. Hawkins recites: "*the computer system could be programmed to allow a user to define new input strokes, and/or to associate symbols, characters, or even complete words or phrases, to a combination of input strokes. Thus, a user-maintained glossary could be built where the user could define the sequences of characters--or symbols, text, or program functions--to be associated with a stroke, a multi-stroke combination, or sequence of multiple stroke combinations*" (column 12, lines 2-11).

Hawkins discloses determining a context in which the handwritten user input is written. Hawkins recites: "*the user could also define new strokes within a table (or other data structure) and assign context to each such stroke*" (column 12, lines 11-13).

Hawkins discloses the symbol to be text expansion or a program. Hawkins discloses text expansion in figure 9, where the user input of "h" is expanded to "sh". Hawkins discloses programs associated to a shorthand type. Hawkins recites: "*a user-maintained glossary could be built where the user could define the sequences of characters--or symbols, text, or program functions--to be associated with a stroke, a multi-stroke combination, or sequence of multiple stroke combinations*" (column 12, lines 6-11).

Hawkins discloses applying the expansion associated with the symbol in Figure 9, where in response to the user writing "h", the display shows "sh".

Hawkins discloses displaying expanded text, implementing a function or launching a program dependent upon the symbol. Hawkins recites: "*a user-maintained glossary could be built where the user could define the sequences of characters--or symbols, text, or program functions--to be associated with a stroke, a multi-stroke combination, or sequence of multiple stroke combinations*" (column 12, lines 6-11).

Hawkins discloses associating handwritten user input with a symbol, where the symbol is used as a function, and where the function is a text expansion or a program, as described above. Hawkins fails to disclose associating the user input with more than one function, and determining the function to use based upon the context of the input within the user written input. Forcier discloses assigning handwritten user input to multiple functions, and determining the proper function to use based upon the context of the input within the user written input.

Forcier discloses assigning a user input to functions. Forcier's user input is a two stroke gesture. Forcier recites: "*Gestures are pen movements used to tell the processor control program to do something. This invention uses a two-part gesture. The first part initiates gesture control; the second part is the gesture itself. The processor allows the user to perform a pen action within the document to indicate that a control gesture is going to be made that should not be interpreted as an additional text/drawing stroke*" (column 13,

lines 36-42). Forcier discloses assigning the user input to multiple functions. Forcier recites: "*A two-step gesture method avoids confusion between strokes and command gestures and allows use of similar gestures for different functions within the same and different contexts*" (abstract). Forcier discloses a determining step where the context is considered to determine the correct function. Forcier recites: "*The gesture set is also context-sensitive as between text and graphical editing, depending on whether the stylus is in a lined writing area or an open (unlined) drawing area of the document. Furthermore, different initial pen actions can be used to obtain different gesture mode prompts. In each case, subsequent gestures initiate different functions, depending on location/context and form of gesture prompt*" (column 4, lines 61-67).

Therefore, it would have been obvious, to one of ordinary skill in the art at the time the invention was made to combine associating handwritten user input with a symbol, where the symbol is used as a function, and where the function is a text expansion or a program, as taught by Hawkins, with the context sensitive user input, as taught by Forcier, in order to provide "*an interactive method for entry and editing of script, text and drawings in a document display*" (Forcier, column 1, lines 16-17).

7. **Regarding dependent claim 13**, the claim is directed toward a computer-readable medium for the method of claim 1, and is rejected using the same rationale.

8. **Regarding independent claim 14**, Hawkins and Forcier disclose the input as handwritten input as described above. Hawkins and Forcier disclose the handwritten user input includes a first and second handwritten input (described as a two stroke gesture), where the choosing depends upon the first handwritten user input includes the second handwritten user input, as described above. See also the "Gesture Based Editing section of Forcier, starting at column 13, line 30 for a complete description of the dependence of the first and second handwritten user strokes. The balance of claim 14 is substantially the same as claim 1, and is rejected using the same rationale.

9. **Regarding dependent claim 15**, Hawkins discloses the first handwritten user input as a single word. Hawkins recites: "*the computer system could be programmed to allow a user to define new input strokes, and/or to associate symbols, characters, or even complete words or phrases, to a combination of input strokes*" (column 12, lines 3-6).

10. **Regarding dependent claim 17**, Forcier discloses the user handwritten input being compared to a predetermined set of symbols, which are used in the determining step. Forcier recites: "*Another aspect of the invention is a method that enables the user to use a single gesture set to manipulate both script and ASCII text, and even drawings, all within a single document*" (column 4, lines 34-37).

11. **Regarding dependent claim 19**, Forcier discloses the second handwritten input as any handwritten user input other than the first

handwritten user input that is simultaneously displayed with the first handwritten input. As described above, Forcier discloses a two stroke gesture, where the first stroke is different than the second stroke, and the first stroke and the second stroke are simultaneously displayed.

12. **Regarding dependent claim 20**, Forcier discloses the first and second handwritten user inputs on the same line in Figure 7B, shown as the "*INSERT SPACE GESTURE*".

13. **Regarding dependent claims 21 and 37-39**, Hawkins discloses receiving handwritten user input, a first and second determining step, and applying an extension. Hawkins fails to disclose determining whether a total handwritten user input word count is equal to one, and if so then determining that the first handwritten user input is not associated with any other handwritten user input. However, Hawkins teaches the determining of associations of first and second user inputs as described above. Hawkins further teaches various user inputs that would allow a determination to be made as to whether the word count was equal to one. For instance, Hawkins' Figure 5A shows typical end of word indicators, including "space" and "CRLF" symbols that would indicate that a complete word had been entered. Therefore, it would have been obvious, to one of ordinary skill in the art, at the time the invention was made, to use a non-printing character symbol to indicate the user had entered a complete word in order to allow the system to be used for word processing functions.

14. **Regarding dependent claims 24 and 25**, Hawkins discloses determining the user input in response to the user input having stopped, or waiting a fixed period of time. Hawkins recites: "*In the past, recognition systems have solved this ambiguity by waiting until the user stopped writing, or by having a fixed delay period, after which characters were recognized*" (column 3, lines 17-20).

15. **Regarding dependent claim 26**, the claim is directed toward a computer-readable medium for the method of claim 14, and is rejected using the same rationale.

16. **Regarding independent claim 27**, the claim is substantially the same as claim 1, and is rejected using the same rationale.

17. **Regarding dependent claim 34**, the claim is directed toward a computer-readable medium for the method of claim 27, and is rejected using the same rationale.

18. **Regarding dependent claims 35 and 36**, Hawkins discloses receiving user input identifying the text expansion and the program prior to receiving the first user handwritten input, as described above.

19. **Regarding independent claims 40-42**, as described above Hawkins describes user created symbols and symbol combinations where the number of symbols and their sequence dictate the association between the symbols and the representation.

Response to Arguments

20. Applicant's arguments filed 5/23/2008 have been fully considered but they are not persuasive.

21. Regarding independent claims 1 and 27, applicant argues: "*Hawkins, et al. does not teach or suggest associated a single stroke/multi-stroke combination with a plurality of entities such as a word expansion, an output generating function and a program simultaneously and a process of discerning a user intent and executing appropriate action based on a context of entry of the stroke/multi-stroke combination*" (page 8, first paragraph, of the response filed 5/23/2008). Applicant is directed to the rejection of the claims, as stated above. Hawkins discloses associating a set of stroke inputs with a word expansion, a function or a program, as described above. However, Hawkins teaches only a "one for one" association. Forcier discloses assigning handwritten user input to multiple functions, and determining the proper function to use based upon the context of the input within the user written input.

22. Applicant further argues: "*Nowhere does Forcier specify that these are functions that receive a symbol as input and generate an output as recited in the subject claims*" (page 8, second paragraph, of the response filed 5/23/2008). Applicant is directed to the rejection of the claims, as stated above. Hawkins is relied upon to show the function aspect.

23. Also, applicant argues: "*Forcier also fails to teach or suggest associating a shorthand entry with a plurality of entities such as a text expansion, an output generating function and a program and implementing an appropriate action associated with one or more of the entities based on a context in which the shorthand entry is made*" (page 8, second paragraph, of the response filed 5/23/2008). Applicant is directed to the rejection of the claims, as stated above. Hawkins is relied upon to show that a user can create associations between user input and text expansions, functions and programs. Forcier is relied upon to show that the one input can several meanings, where the appropriate meaning is determined by contextual clues.

Conclusion

24. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action.

In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory J. Vaughn whose telephone number is (571) 272-4131. The examiner can normally be reached Monday to Friday from 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen S. Hong can be reached at (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Stephen S. Hong/
Supervisory Patent Examiner, Art Unit 2178

/Gregory J. Vaughn/
Patent Examiner
September 2, 2008